

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An image forming apparatus, comprising:
a first image carrier that transfers an image to a first surface of a recording medium;
a second image carrier that transfers an image to a second surface of the recording medium; and
a conveying unit that directly conveys the recording medium, to which the image has been transferred by the second image carrier, substantially vertically from the second image carrier to a fixing unit, wherein a conveying speed of the recording medium at the fixing unit is equal to or lower than a conveying speed of the recording medium on the second image carrier.

Claim 2 (Original): The image forming apparatus according to claim 1, wherein the conveying speed of the recording medium at the fixing unit is 90 to 100 % of the conveying speed of the recording medium on the second image carrier.

Claim 3 (Original): The image forming apparatus according to claim 1, wherein the second image carrier is made of heat-resistant material.

Claim 4 (Original): The image forming apparatus according to claim 3, wherein the heat-resistant material is polyimide.

Claim 5 (Original): The image forming apparatus according to claim 1, further comprising a cooling unit that cools the second image carrier.

Claim 6 (Original): The image forming apparatus according to claim 5, wherein the cooling unit includes a heat pipe.

Claim 7 (Original): The image forming apparatus according to claim 1, further comprising a cleaning unit that cleans toner remaining on the second image carrier while the toner melts due to heat from the fixing unit.

Claim 8 (Original): The image forming apparatus according to claim 7, wherein the cleaning unit includes a roller having a surface roughness greater than a surface roughness of the second image carrier, wherein the roller is moveably supported so as to touch the second image carrier or separate from the second image carrier.

Claim 9 (Original): The image forming apparatus according to claim 8, wherein the surface roughness of the second image carrier is 3.5 micrometers or less and the surface roughness of the roller is 3.5 micrometers or more.

Claim 10 (Currently Amended): The image forming apparatus according to claim 7, ~~further comprising~~

~~a supporting unit that moveably supports~~ wherein the cleaning unit is moveable in such a manner that the cleaning unit touches the second image carrier or separates from the second image carrier[;], ~~and a movement controlling unit that controls the supporting unit,~~ wherein when there is an image on the second image carrier, the ~~movement controlling unit controls the supporting unit in such a manner that~~ the cleaning unit separates from the second image carrier.

Claim 11 (Currently Amended): The image forming apparatus according to claim 1, wherein the first image carrier is an electrophotographic photoreceptor, and the second image carrier is a belt made of a material having a surface resistivity of a range from ~~10⁵~~ 10⁵ to ~~10¹²~~ 10¹² Ω/sq .

Claim 12 (Original): The image forming apparatus according to claim 1, wherein a toner releasing layer is formed on the second image carrier.

Claim 13 (Currently Amended): The image forming apparatus according to claim 1, wherein the toner releasing layer is a layer of ~~Teflon (trade mark)~~ perfluoroalkoxy.

Claim 14 (Original): The image forming apparatus according to claim 1, wherein there is a gap between a position at which a recording medium on the second image carrier is transferred to the fixing unit and a position at which the recording medium is received in the fixing unit, and a width of the gap is 60 millimeters or less.

Claim 15 (Canceled).

Claim 16 (Original): An image forming apparatus, comprising:
a first image carrier having a surface for carrying a toner image formed through an electrophotographic process;
a second image carrier on which the toner image on the first image carrier is transferred, and that conveys a recording medium;
a first transfer unit that transfers the toner image from the first image carrier to the

second image carrier and to a first surface of the recording medium conveyed by the second image carrier;

a second transfer unit that transfers the toner image from the second image carrier to a second surface of the recording medium conveyed by the second image carrier;

a fixing unit disposed on downstream side of the second transfer unit with respect to direction of conveyance of the recording medium, the fixing unit including

a fixing roller having a heat source;

a pushing roller that pushes the fixing roller; and

a support roller, wherein a belt is wound around between the support roller and the pushing roller, and the support roller rotates in the same direction as that of the pushing roller to rotate the belt, wherein the fixing unit fixes the toner image on the recording medium; and

a guide unit that conveys the recording medium from the second image carrier toward the fixing unit, that brings the recording medium into contact with the belt wherein an angle is set to 60 degrees or less, the angle being formed between a direction of conveying the recording medium by the second image carrier and a moving direction of a portion of the belt in a zone from the support roller toward the pushing roller, and that guides the recording medium to a nip part between the fixing roller and the pushing roller.

Claim 17 (Original): The image forming apparatus according to claim 16, wherein the angle is 30 degrees.

Claim 18 (Original): The image forming apparatus according to claim 16, wherein the guide unit is controlled so that a conveying speed of the recording medium by the second image carrier is set to be equal to a conveying speed of the belt, or a conveying speed of the

recording medium is set to be faster than that of the belt.

Claim 19 (Original): The image forming apparatus according to claim 16, further comprising a unit that produces a potential difference between the belt and paper so that the paper adheres to the belt by electrostatic force.

Claim 20 (Original): The image forming apparatus according to claim 19, further comprising a charger that electrically charges the belt.

Claim 21 (Original): The image forming apparatus according to claim 20, wherein the charger applies an electric charge of a reverse polarity, with respect to a polarity of toner, to the belt.

Claim 22 (Currently Amended): An image forming system, comprising:
an image forming apparatus including
a first image carrier that transfers an image to a first surface of a recording medium;
a second image carrier that transfers an image to a second surface of the recording medium; and
a conveying unit that conveys the recording medium, to which the image has been transferred by the second image carrier, substantially vertically from the second image carrier to a fixing unit, wherein a conveying speed of the recording medium at the fixing unit is equal to or lower than a conveying speed of the recording medium on the second image carrier;
an information processing unit connected to the image forming apparatus through a communication means; and

an image formation controlling unit that performs controls over image formation including transmission of data for image formation from the information processing unit to the image forming apparatus.